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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,785	12/17/2001	Terry Robison	10016716-1	7096

7590 11/17/2005  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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BURGESS, BARBARA N

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/022,785

Applicant(s)

ROBISON, TERRY

Examiner

Barbara N. Burgess

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This Office Action is in response to amendments filed August 24, 2005. Claims 1-20 are presented for further examination.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 9, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Walrand et al. (hereinafter "Walrand", US Patent No. 6,647,413 B1).

As per claims 1, 9, and 17, Walrand discloses a computing apparatus, a machine readable medium or media having recorded thereon instructions configured to instruct a computing apparatus, and a method for storing a set of summarized metrics of a plurality of data elements comprising a processor operatively coupled to a memory, said memory having a data structure stored therein representing a set of summarized metrics of a plurality of data elements, said data structure comprising:

(a) an indication of an average value of said plurality of data elements (column 7, lines 55-57, column 10, lines 5-8; Walrand discloses determining the average delay (average value) of a plurality of delay values (data elements));

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- (b) a count value indicating a number of data elements in said plurality of data elements (column 7, lines 14-15, 24, 55-57; Walrand inherently discloses a count value used to calculate the average delay. It is disclosed to calculate the average delay, the summation of the total delays divided by the total number of delays is used. Therefore, a count value indicating a number of data elements (total number of delays) is inherent);
- (c) an indication of a minimum value and a maximum value of said plurality of data elements (column 7, lines 59-60);
- (d) an indication of a standard deviation of said plurality of data elements (column 7, lines 57-58, column 8, lines 1-5).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-8, 10-16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walrand et al. (hereinafter "Walrand", US Patent No. 6,647,413 B1) in view of Shin et al. (hereinafter "Shin", US Patent Publication 2002/0157054 A1).

As per claims 2, 10, and 18, Walrand discloses a computing apparatus, a machine readable medium or media, and a method for storing a set of summarized metrics of a plurality of data elements in accordance with Claims 1, 9, and 17.

Walrand does not explicitly disclose obtaining performance measurements of a storage area network.

However, obtaining performance measurements of a storage area network is well known to one of ordinary skill in the art as evidenced by Shin (Abstract, paragraph [0071]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate or implement Shin's obtaining performance measurements of a storage area network in Walrand's method in order to reduce the overall cost and increase the overall performance of communications.

As per claims 3, 11, and 19, Walrand discloses a computing apparatus, a machine readable medium or media, and a method for storing a set of summarized metrics of a plurality of data elements in accordance with Claims 2, 10, and 18, wherein said indication of an average value of said plurality of data elements is an instance of an object comprising a stored alterable value of a primitive numeric type, said object thereby being a MutableNumber object (column 7, lines 55-58).

As per claims 4, 12, Walrand discloses a computing apparatus, a machine readable medium or media in accordance with Claims 3, 11, wherein said indication of

said minimum value and said maximum value is an instance of an object comprising two instances of MutableNumber object (column 6, lines 27-33).

As per claims 5, 13, Walrand discloses a computing apparatus, a machine readable medium or media in accordance with Claims 4, 12, configured to perform computations using said instances of MutableNumber objects in accordance with the primitive numeric type stored therein, and to change values stored in said MutableNumber objects without changing said primitive numeric types (column 9, lines 1-65).

As per claims 6, 14, and 20, Walrand discloses a computing apparatus, a machine-readable medium or media, and a method for storing a set of summarized metrics of a plurality of data elements in accordance with Claims 2, 10, 19. Walrand does not explicitly disclose utilizing said data structure to produce at least one of a performance summary of the storage area network or a prediction of the performance of the storage area network. However, utilizing said data structure to produce at least one of a performance summary of the storage area network or a prediction of the performance of the storage area network is well known to one of ordinary skill in the art as evidenced by Shin (Abstract, paragraph [0108, 0124]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate or implement Shin's utilizing said data

structure to produce at least one of a performance summary of the storage area network or a prediction of the performance of the storage area network in Walrand's method in order to reduce the overall cost and increase the overall performance of communications.

As per claims 7, 15, Walrand discloses a computing apparatus, a machine readable medium or media in accordance with Claims 6,10, wherein said performance measurements comprise available storage and corresponding elapsed times (column 10, lines 5-14).

As per claims 8, 16, Walrand discloses a computing apparatus, a machine readable medium or media in accordance with Claims 6, 14, wherein said memory further has stored therein an instance of an object comprising an ordered set of data elements and values representing a Y-intercept and slope of a best fit linear relationship of said ordered set of data elements (column 8, lines 10-15).

### ***Response to Arguments***

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N. Burgess whose telephone number is (571) 272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 8, 2005

  
ARIO ETIENNE  
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